

AD-HOC SERVICE DISCOVERY PROTOCOL

Abstract

An ad-hoc discovery protocol improves reliability, security and scalability of multicast and server-based discovery. In switching from multicast to server-based discovery, the discovery client is made responsible for multicast suppression, and not discoverable devices with services. Messages include message identifier and time-to-live parameters to detect recast queries and avoid duplicating replies. A device's announcement message includes endpoint identifier, configuration number and stateless boot time parameters to detect changed device configuration and rebooted state for refreshing cached device and service descriptions. Paging parameters allow a discovery client to control the number of discovery responses returned at a time from a discovery server.